

# Fact Sheet



## *For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: **R30-01700011-2012**  
Application Received: **July 28, 2011**  
Plant Identification Number: **01700011**  
Permittee: **Dominion Transmission, Inc.**  
Facility Name: **West Union Plant**  
Mailing Address: **445 West Main Street**  
**Clarksburg, WV 26301**

---

|                    |   |
|--------------------|---|
| Physical Location: | West Union, Doddridge County, West Virginia                 |
| UTM Coordinates:   | 516.45 km Easting • 4352.50 km Northing • Zone 17           |
| Directions:        | 5 miles north of West Union on Highway 18, Doddridge County |

---

### **Facility Description**

The West Union Plant is a natural gas liquids extraction facility. Propane and heavier components of natural gas are removed through a turbo-expander cryogenic process, and a mixed natural gas liquids product is produced. It is covered by primary Standard Industrial Code (SIC) 1321 and secondary SIC 4922. The plant has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The plant consists of two (2) 730-hp natural gas fired reciprocating engines and 8 storage tanks.

## Emissions Summary

| <b>Plantwide Emissions Summary [Tons per Year]</b> |                            |                              |
|--|----------------------------|------------------------------|
| <b>Regulated Pollutants</b>                        | <b>Potential Emissions</b> | <b>2010 Actual Emissions</b> |
| Carbon Monoxide (CO)                               | 12.7                       | 7.55                         |
| Nitrogen Oxides (NO <sub>x</sub> )                 | 267.88                     | 159.25                       |
| Particulate Matter (PM <sub>10</sub> )             | 0.54                       | 0.32                         |
| Total Particulate Matter (TSP)                     | 0.54                       | 0.32                         |
| Sulfur Dioxide (SO <sub>2</sub> )                  | 0.03                       | 0                            |
| Volatile Organic Compounds (VOC)                   | 77.68                      | 51.97                        |

  

| <b>Hazardous Air Pollutants</b>                   | <b>Potential Emissions</b> | <b>2010 Actual Emissions</b> |
|---|----------------------------|------------------------------|
| Formaldehyde                                      | 1.16                       | 0.69                         |
| Acrolein  | 0.16                       | 0.09                         |
| Acetaldehyde                                      | 0.15                       | 0.09                         |
| Benzene   | 0.09                       | 0.05                         |
| Ethylbenzene                                      | < 0.01                     | 0                            |
| Toluene   | 0.03                       | 0.02                         |
| Xylene  | 0.01                       | 0.01                         |
| <b>TOTAL HAPs</b>                                 | 1.61                       | 0.95                         |
| Regulated Pollutants other than Criteria and HAP: |                            |                              |
| CO <sub>2</sub> e                                 | 6,827.65                   | Not reported                 |

*Some of the above HAPs may be counted as PM or VOCs.*

## Title V Program Applicability Basis

This facility has the potential to emit 267.88 tons/yr of NO<sub>x</sub>. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

|                    |                                    |   |
|--------------------|------------------------------------|---|
| Federal and State: | 45CSR6                             | Open burning prohibited.  |
|                    | 45CSR11                            | Standby plans for emergency episodes.   |
|                    | 45CSR13                            | Pre-construction permit   |
|                    | 45CSR16                            | Standards of Performance for New Stationary Sources 40CFR60   |
|                    | WV Code § 22-5-4 (a) (14)          | The Secretary can request any pertinent information such as annual emission inventory reporting                   |
|                    | 45CSR30                            | Operating permit requirement  |
|                    | 40 C.F.R. Part 60, KKK             | Equipment leaks of VOC from Onshore Natural Gas Processing Plants   |
|                    | 40 C.F.R. Part 60, VV <sup>1</sup> | Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry                                  |
|                    | 40 C.F.R. Part 61                  | Asbestos inspection and removal   |
|                    | 40 C.F.R. Part 63, Subpart ZZZZ    | National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines |
|                    | 40 C.F.R. Part 82, Subpart F       | Ozone depleting substances  |
| State Only:        | 45CSR4                             | No objectionable odors.   |
|                    | 45CSR17                            | Particulate Fugitive  |

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

| Permit or<br>Consent Order Number | Date of<br>Issuance | Permit Determinations or Amendments That<br>Affect the Permit ( <i>if any</i> ) |
|-----------------------------------|---------------------|---|
| None                              |                     |   |

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

<sup>1</sup>Requirements incorporated by reference in 40 C.F.R. 60, Subpart KKK.

## Determinations and Justifications

The following are changes/additions to the most recent Title V permit for this facility:

1. Emission Units Table 1.1 – added Tanks TK01 - TK08. These Tanks do not have applicable requirements (see Non-Applicability Determinations section below, items 2 through 4).
2. Section 4.0 - added to include provisions of Part 63 Subpart ZZZZ “*National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*” applicable to the following reciprocating internal combustion engines (RICE):

| Engine  | Design Capacity | Ignition      | Use/Type                         | Year installed   | HAP Source Classification |
|---------|-----------------|---------------|----------------------------------|------------------|---------------------------|
| 001-01* | 730 HP          | Spark Ignited | Non-emergency, 4Stroke Rich Burn | 1984 (existing)* | Area source               |
| 001-02* | 730 HP          | Spark Ignited | Non-emergency, 4Stroke Rich Burn | 1984 (existing)* | Area source               |

\* area source units constructed before June 12, 2006 (§63.6590(a)(1)(iii))

3. Appendix A - added section **§60.633 Exceptions** to Part 60 Subpart KKK applicable requirements.
4. Appendix B was added to include applicable requirements of 40 C.F.R. 60 Subpart VV.

## Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 C.F.R. 63, Subpart HH “National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities” is not applicable to West Union plant because it doesn’t have a “triethylene glycol (TEG) dehydration unit located at a facility” (as per 40 C.F.R. §63.760(b)(2)). Additionally, the Subpart HH requirements for natural gas liquids extraction do not apply to non-Major/Area HAP sources.
2. 40 C.F.R. 60, Subpart K “Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after June 11, 1973 and prior to May 19, 1978” – all tanks were constructed after July 23, 1984, therefore they are exempt from this subpart.
3. 40 C.F.R. 60, Subpart Ka “Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after May 18, 1978 and prior to July 23, 1984” – all tanks were constructed after July 23, 1984, therefore they are exempt from this subpart.
4. 40 C.F.R. 60, Subpart Kb “Standards of Performance for VOC Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984” : tanks TK01 through TK05 are below the minimum size threshold of 75 m<sup>3</sup> (19,813 gal), therefore they are exempt from the requirements of this Subpart per 40 CFR §60.110b(a) . The NGL tanks (TK06 – TK08) size (30,000 gal) is in the applicable range of 75 m<sup>3</sup> - 151 m<sup>3</sup> (19,813 gal - 39,890 gal), but they are pressure vessels designed to operate at 1,034 kPa (in excess of 204.9 kPa), and do not have emissions to the atmosphere. Therefore, they are exempt per 40 CFR §60.110b(d)(2).
5. 40 C.F.R. 64 - Engines do not have any control; Therefore, in accordance with 40 C.F.R. §64.2(a)(2), CAM is not applicable to the engines.

6. There are no Greenhouse Gas Clean Air Act requirements for this facility because this renewal has not triggered a PSD permit.

### **Request for Variances or Alternatives**

None.

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

|                 |                  |
|-----------------|------------------|
| Beginning Date: | January 10, 2012 |
| Ending Date:    | February 9, 2012 |

All written comments should be addressed to the following individual and office:

Natalya V. Chertkovsky-Veselova  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

Natalya V. Chertkovsky-Veselova  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1220 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

N/A